

# DIGITAL GAMES, COLLECTORS AND (ARTIFICIAL) SCARCITY: THE DIGITAL FUTURE MIGHT BE A BIT PHYSICAL AFTER ALL

Miroslav MACÁK – Veronika ŠAŠALOVÁ

## ABSTRACT:

Among other things, digital games can be considered valuable cultural artefacts, and in their physical form, they are inherently collectable. The study aims to reflect on digital game collecting and investigate the impact it has on the contemporary digital games industry. The current trend we would like to focus on further is the influx of 'limited-print run' companies and their products, i.e., small-scale companies that produce physical copies of otherwise digital-only games in a limited quantity or within a limited time frame. The study aims to examine the impact of limited-print game distribution on the digital games market, as well as explore what the emergence of this trend can mean in terms of the current state of the digital games industry from the collectors' perspective. The study is largely theoretical; the methods of logical reasoning, i.e., analysis, synthesis, specification, comparison and wider generalisation are used to address the given topic. The discussed issues are then interpreted in relation to today's digital games industry, more specifically to some of its key products.

## KEY WORDS:

artificial scarcity, collecting, digital games, limited-print games, physical media

## 1 Introduction

Digital games, video games, computer games or electronic games. Under a number of different adjectives, a singular principle can be found. The act of using an electronic device to play a game. Such a simple yet, in fact, complex concept has outgrown its cult status and digital games have become a widespread cultural phenomenon. Wignet and Murray describe the contemporary situation quite clearly: "*The videogame industry is at a critical moment in its history. As videogames are increasingly recognized as important cultural artifacts, the games are becoming more and more difficult to access and play, videogame pioneers are getting older and*



Mgr. Miroslav Macák  
Faculty of Mass Media Communication  
University of Ss. Cyril and Methodius in Trnava  
Nám. J. Herdu 2  
917 01 Trnava  
Slovak Republic  
macak1@ucm.sk

Miroslav Macák is currently a full-time PhD. student at the Faculty of Mass Media Communication at the University of Ss. Cyril and Methodius in Trnava, Slovakia. He received both his Bachelor's and Master's degrees at the same institution in the study programme Theory of Digital Games. The main topic of his research is the industry of digital games. He is predominantly interested in Japanese digital game production and digital role-playing. He also focuses on mainstream, AAA and independent production of digital games, narration in digital games, game genres and current trends in the digital games industry (technological, narrative and design).



Mgr. Veronika Šašalová  
Faculty of Mass Media Communication  
University of Ss. Cyril and Methodius in Trnava  
Nám. J. Herdu 2  
917 01 Trnava  
Slovak Republic  
sasalova2@ucm.sk

Veronika Šašalová is a PhD. candidate at the Faculty of Mass Media Communication at the University of Ss. Cyril and Methodius in Trnava, Slovakia. She graduated in Bachelor's study programme Literary Production at the University of Creative Communication in Prague, Czechia and earned a Master's degree at Masaryk University in Brno in the study programme Literature and Intercultural Communication. She focuses on the relationship between media and their socio-cultural framework. The main topics of her research are independent digital game production and the ways in which digital games contribute to feminist and ecocritical discourse.

older, and their primary materials are being thrown away as companies go out of business, or are deteriorating in garages and attics across the nation.”<sup>1</sup>

The statement also indirectly poses the question of how to preserve the original gaming experiences. Moving from arcades to online lobbies, digital games have undoubtedly become valuable cultural artefacts that reflect the time period when they were made in terms of both their form and content. Their content has to be stored somewhere, whether on a hard-drive, digital versatile disc or cartridge. It is important to acknowledge that institutional preservation of digital games is becoming increasingly important in academic and professional circles alike.<sup>2</sup> An especially insightful publication by Guins, which is entitled *Game After: A Cultural Study of Video Game Afterlife*, addresses the strive for institutional preservation, outlining its undeniable correlation with activities of private digital game collectors.<sup>3</sup>

However, instead of exploring the processes of institutional and archival preservation,<sup>4</sup> we would like to focus on digital game companies aiming to appeal to private, amateur collectors, those who collect as a hobby and not as a part of their work or project, i.e., collectors interested in physical data holders containing digital games. After all, the uniqueness of the medium containing a digital game might be a significant part of the content’s ‘collectable appeal’. However, the study works with the assumption that collecting digital games is more financially (and otherwise) demanding than ever before, since the digital age has transformed the gaming industry quite significantly. Nowadays, it is always uncertain whether a digital game will be released as a completed product, ‘dosed’ (continually updated to receive new content), or whether it will be provided as a virtual service. Digital games are indeed losing their ‘touchability’.<sup>5</sup>

The main aim of the study is to discuss and explain an economic synergy merging interests of digital games collectors and game producers that has led to the existence of limited-print companies and their physically released games. What started as a *niche* return to physical media has since turned into a widespread business model. By explaining how and why these limited releases came to be and considering both the positive and negative impacts their existence has on the digital games industry, we intend to find answers to the following questions: Is limited-print publishing a viable market strategy? Is limiting the production of physical copies ethical towards hobbyists and collectors? How can limited-print releases impact the digital games industry as a whole?

## 2 Evolution of the Medium of Digital Games: From Physical to Digital

Before the rise of the Internet, physical data-holders were necessary to deliver the game to the player. Nevertheless, there had been experiments concerning digitally transmitted data even before that; for example, Nintendo’s Satellaview, a peripheral for Super Famicom in Japan that utilised broadcasting to download games.<sup>6</sup> Digital distribution on consoles, however, did not become widespread until the 7<sup>th</sup> console generation. During that era, physical data-holders for home gaming consoles were already standardised as disc-based media. While Xbox 360 used DVDs with an optional HD DVD expansion, PlayStation 3 was the first console to utilise Blu-Ray technology, which has not been replaced since. Hand-held consoles mostly opted for small cartridges instead. It is necessary to underline that cartridges are still used by the hybrid console Nintendo Switch.

1 WINGET, M. A., MURRAY, C.: Collecting and Preserving Videogames and Their Related Materials: A Review of Current Practice, Game-Related Archives and Research Projects. In *Proceedings of the American Society for Information Science and Technology*, 2008, Vol. 45, No. 1, p. 1.

2 See: GARDA, M. B. et al.: From Cultural Sustainability to Culture of Sustainability: Preservation of Games in the Context of Digital Materiality. In *Proceedings of DiGRA 2020*, 2020, Vol. 15, No. 1, p. 1-15. [online]. [2022-04-29]. Available at: <[http://www.digra.org/wp-content/uploads/digital-library/DiGRA\\_2020\\_paper\\_438.pdf](http://www.digra.org/wp-content/uploads/digital-library/DiGRA_2020_paper_438.pdf)>; BARWICK, J., DEARNLEY, J., MUIR, A.: Playing Games with Cultural Heritage: A Comparative Case Study Analysis of the Current Status of Digital Game Preservation. In *Games and Culture*, 2011, Vol. 6, No. 4, p. 373-390; HOSOI, K., MACÁK, M.: Preserving Japan: Saving Digital Games for Future Generations. Interview with Koichi Hosoi. In *Acta Ludologica*, 2021, Vol. 4, No. 1, p. 124-130.

3 See: GUINS, R.: *Game After: A Cultural Study of Video Game Afterlife*. Massachusetts : The MIT Press, 2014.

4 See, for example: WOOD, K., CARTER, D. S.: Art and Technology: Archiving Video Games for Humanities Research in University Libraries. In *Art Libraries Journal*, 2018, Vol. 43, No. 4, p. 185-195.

5 KABÁT, M.: Editorial: One Does Not Simply Buy a Game Anymore. In *Acta Ludologica*, 2019, Vol. 2, No. 1, p. 2.

6 Nintendo Aims High with ‘Satellaview’. In *NEXT Generation*, 1995, Vol. 1, No. 5, p. 18-19.

At first, console digital storefronts acted more as a supplementary addition to the physically distributed media, offering additional content and smaller-scale games. This can be clearly pointed out by early PlayStation 3 releases, some of which never received digital release. Notable titles belonging to this category are *3D Dot Game*,<sup>7</sup> *Final Fantasy XIII*,<sup>8</sup> *Folklore*,<sup>9</sup> *Heavenly Sword*,<sup>10</sup> etc. A small number of cult titles, such as *Metal Gear Solid 4: Guns of Patriots*,<sup>11</sup> were retroactively added to the digital store.<sup>12</sup>

The 8<sup>th</sup> and current 9<sup>th</sup> generation-consoles offered by all three major console manufacturers were fully adapted to the digital age. Their respective digital storefronts were ready to function at launch. Nowadays, simultaneous digital and physical launch is a standard practice. Some digital games developers even promote digital versions over physical, offering unique ‘digital’ bonuses. An example of this practice is the latest entry in the *Crash Bandicoot* series, *Crash Bandicoot 4: It’s about Time*.<sup>13</sup> Players could only get a certain exclusive attire for their characters by pre-ordering the digital version of the game. This obvious push towards digital distribution can be attributed to lower production costs and thus higher profits achieved by the involved companies, but it also encompasses other, less visible consequences.

Švelch discusses some of these consequences, proposing an interesting argument – that the developers and publishers’ ability to readily alter the content of the game through various forms of patches and updates can be seen as a form of control that companies extrude over their games. In the past, the player decided whether they wanted to install the latest update or not. Currently, the process is automated and players have to actively seek counter-measures if they want to circumvent the update.<sup>14</sup> Even though these automated updates also apply to games on physical media, they are only installed to the console, and not the medium itself, making it possible to still play the older version of the game; for example, by re-installing the title and disconnecting the console from the Internet. To put it differently, the game as a physical medium will always be available in the state it was released in.

A digital version of a game usually has the same market-suggested retail price as its physical counterpart. By selling games digitally, the otherwise key aspects such as manufacturing, packaging, logistics and aftermarket are entirely omitted. The price is set by the platform holder and publisher (in many cases these are affiliated with the same business entity), so the game can be sold for a set price and no fluid pricing reacting to offer and demand needs to be applied. One could argue that digital versions are more convenient and economically lucrative than their physical counterparts, as developers achieve higher profit from each sale; moreover, they are conveniently stored on servers, accessible at any time, and there is no need to change a disc or cartridge every time the player wants to play a different game.

Contrary to all the above-mentioned advantages of digital distribution, it also encompasses a multitude of shortcomings. And thus, the following questions remain unanswered: Can digital distribution provide constant access to sold games? Are digital redistribution platforms concerned with longevity? Is the customer truly the owner of the product? Moreover, this widespread digitalisation may be largely convenient, but it does not favour collectors of digital games delivered via physical media, particularly due to the attempts to make physical games obsolete. Thus, it is necessary to outline and reconsider the commercial importance of digital games collectors.

7 SILICON STUDIO: *3D Dot Game Heroes*. [Digital game]. Tokyo : Atlus, 2009.

8 SQUARE ENIX: *Final Fantasy XIII*. [Digital game]. Tokyo : Square Enix, 2009.

9 GAME REPUBLIC: *Folklore*. [Digital game]. Tokyo : Sony Computer Entertainment, 2007.

10 NINJA THEORY: *Heavenly Sword*. [Digital game]. Tokyo : Sony Computer Entertainment, 2007.

11 KOJIMA PRODUCTIONS: *Metal Gear Solid 4: Guns of Patriots*. [Digital game]. Tokyo : Konami, 2008.

12 CHEN, G.: *PlayStation Store Update*. Released on 16<sup>th</sup> December 2014. [online]. [2022-05-07]. Available at: <<https://blog.playstation.com/2014/12/16/playstation-store-update-373/>>.

13 TOYS FOR BOB: *Crash Bandicoot 4: It’s about Time*. [Digital game]. Santa Monica : Activision, 2020.

14 See: ŠVELCH, J.: Resisting the Perpetual Update: Struggles against Protocological Power in Video Games. In *New Media & Society*, 2019, Vol. 21, No. 7, p. 1594-1612.

### 3 Collecting Digital Games: Nostalgia vs. Commercial Value

*“The collector? A harmless eccentric, who spends his days sorting out stamps, impaling butterflies on pins or revelling in erotic engravings. Or quite the reverse, a wily speculator who buys up works of art for next to nothing, only to sell them for fabulous sums, all the while claiming to be an art lover.”*<sup>15</sup> The foreword of Pomian’s book, *Collectors and Curiosities*, defines the term “collector” in a rather unflattering manner, which is in sharp contrast with today’s understanding of fans and fan culture. Moreover, another problem is related to the question of gender. Maalsen and McLean claim that the literature on collecting has traditionally seen this activity as a masculine phenomenon, positioning feminine actors as consumers rather than collectors. As for collecting records, however, the authors remind us that ethnographic research on record collectors shows that women do collect, but their collecting practices are overlooked due to the type of objects or genres being collected.<sup>16</sup> We may presume that the same gender bias apply to the industry of digital games, too; even though research data that would reflect this issue is not available. Nevertheless, Benjamin’s much older description of collectors and their relationship to their collections still preserves its relevance: *“Thus, there is in the life of a collector a dialectical tension between the poles of disorder and order. Naturally, his existence is tied to many other things as well: to a very mysterious relationship to ownership, (...) also, to a relationship to objects which does not emphasize their functional, utilitarian value—that is, their usefulness—but studies and loves them as the scene, the stage, of their fate. The most profound enchantment for the collector is the locking of individual items within a magic circle in which they are fixed as the final thrill, the thrill of acquisition, passes over them.”*<sup>17</sup>

Zonneveld and Biggeman argue that *“collected objects that are consciously and purposely chosen indicate that a relationship exists between individuals and the objects”*. The authors also state that in-depth interviews conducted with collectors who share a strong interest in what could be considered, in a monetary sense, low value objects, can be a viable way of uncovering their motivations to collect them. According to them, culture strongly influences collecting decisions and can determine what objects hold more meaning than others.<sup>18</sup> Geraghty further explains that *“the collector sets their own goals and targets particular items”* that might (or might not) mean something very personal to them.<sup>19</sup> Considering late modern cultural trends, Pearce defines three predominant modes of collecting – souvenir, fetishist and systematic. The individual uses souvenir collecting to create *“a romantic life-history by selecting and arranging personal material”*. In contrast, fetishist collectors see the objects they collect as dominant, expressing their obsessive need to gather as many items as possible. As the author points out, these objects help the collector create a sense of self. Systematic collectors follow a rational path – they may seek collectibles just because they want to complete their collections. However, all three types of collecting may occur at the same time.<sup>20</sup> When applied to digital games, this taxonomy implies that digital games collectors may seek ‘souvenirs’ to expand their collections and nostalgically ‘relive’ their decades-old gaming experience (or, if they are much younger, they might explore digital games they could not experience at the time of their initial release, for understandable reasons). Fetishist collectors would not seek specific titles, however; they tend to focus on the scale of their collection, gathering as many items worthy of collecting as possible. Given that collecting digital games is nowadays a commercially interesting activity as well, many collectors tend to express the systematic approach, focusing on titles that do not have to invoke either nostalgia or fetishism. Dillon, the founder and curator of Singapore’s James Cook University Museum of Video and Computer Games, says that *“retro video games have become a kind of modern relic (...)*

*intertwined with nostalgia, pop culture and technological history”*. Dillon also reminds that unopened, shrink-wrapped early editions of cult titles are the most valuable items: *“If you open it, the value of the game halves.”* That is why the market has seen the emergence and upsurge of professional grading and classification of such collectibles.<sup>21</sup>

Even though digital games can be, and sometimes are, purchased solely for the reason of commercially interesting ownership, most of them are purchased because their owners actually want to play them.<sup>22</sup> Their functional value is still relevant even if they are a part of a collection. There are systematic collectors who seek sealed games, but their interest may not lie in the act of collecting itself, but in the item’s monetary value instead. Digital games have been sold for four-, five-, and even six-digit sums, which makes them a prime target for resellers. In an interview for *The New York Times*, Bailey interviewed several collectors, asking about their practices. Brock underlines the monetary value of retro games. As he outlined during the interview, one sealed Nintendo Entertainment System game can cost nearly 1,500 American dollars. He had its condition graded, and then sold it for more than 12,000 dollars. Hamblin, the owner of SideQuest Games in Portland, even claims that *“you almost can’t pay too much because stuff is going up so fast”*.<sup>23</sup>

Whichever type of collector a person is, they all have to partake in the act of obtaining a digital game. Even such a seemingly simple action as purchasing a game has its nuances. A study by Jonson and Luo explores the two main ways in which players purchase their games. They compare the act of pre-ordering a game and bulk-purchases of discounted games. Their research suggests that the former is more often associated with the perceived value of the game in the eyes of the player. Players are more likely to pre-purchase a game if they know they will play it immediately, or if they want to financially support the studio behind the game. The latter is often a reaction to discounts ‘too good to be true’. Games purchased in this way often remain unplayed, maybe even untouched and thus form ‘backlog’.<sup>24</sup> The amassing of so-called backlog is inherently connected with game collecting, as many games are acquired only to enlarge the collection, with the possibility of being played in the future. This also shows that game collectors have slightly different attitudes towards their collections than collectors of different kinds of items. According to Markovová, the collector’s relationship to the objects of their interest goes far beyond their relationship to other things, which fulfils an *“only utilitarian”* function. Collecting is an autobiographical and intimate act of understanding the essence of a collection, which means grasping the nature of its owner. Collectors themselves are aware of the special relationship with the items and sometimes do not hide their privileged position compared to ‘ordinary’ things.<sup>25</sup> Markovová’s approach to the relationship between an object and the collector can be used to distinguish between digital game collectors and players more critically. Even players can own a significant number of digital games, yet they do not aim to amass and maintain a collection. They purchase the games they play and rarely have an emotional attachment to the physical media themselves, focusing on the playable content instead. The ‘backlog’ for non-collectors is humorously referred to as ‘a pile of shame’ rather than prized possession.<sup>26</sup> Collectors, on the other hand, value the physical, tangible aspect of digital games and the general ownership of a game. The disc, the box, the instruction booklet, and everything that came with the original packaging is considered as important as the game itself. Moreover, people collecting digital games tend to appreciate artistic creations included in collector’s editions.<sup>27</sup>

15 POMIAN, K.: *Collectors and Curiosities*. Cambridge : Polity Press, 2014, p. 1.

16 MAALSEN, S., MCLEAN, J.: Record Collections as Musical Archives: Gender, Record Collecting, and Whose Music Is Heard. In *Journal of Material Culture*, 2017, Vol. 23, No. 1, p. 39.

17 BENJAMIN, W.: *Illuminations: Essays and Reflections (collected by Hannah Arendt)*. New York : Schocken Books, 1999, p. 60.

18 ZONNEVELD, L., BIGGEMANN, S.: Emotional Connections to Objects as Shown through Collecting Behaviour: The Role of Ardour. In *Australasian Marketing Journal*, 2014, Vol. 22, No. 4, p. 325.

19 GERAGHTY, L.: *Cult Collectors*. Abingdon-on-Thames : Routledge, 2014, p. 180.

20 PEARCE, S.: *On Collecting: An Investigation into Collecting in the European Tradition*. Abingdon-on-Thames : Routledge, 1995, p. 32.

21 HILLS, M. C.: *Why Your Old Video Games May Be Worth Millions*. Released on 16<sup>th</sup> August 2021. [online]. [2022-05-07]. Available at: <<https://edition.cnn.com/style/article/most-expensive-video-games/index.html>>.

22 Remark by authors: This can be exemplified by Internet influencers who present themselves as game collectors, yet still do reviews and voice their impressions on games from their collections (for example, *YouTube* content creators HappyConsoleGamer, MetalJesusRocks, Pat the NES Punk, RGT).

23 BAILEY, J. M.: *Collectors Are Spending Thousands on Video Games They Will Never Play*. Released on 27<sup>th</sup> January 2020. [online]. [2022-05-07]. Available at: <<https://www.nytimes.com/2020/01/27/business/video-games-wata-heritage.html>>.

24 JONSON, M. R., LUO, Y.: Gaming-Value and Culture-Value: Understanding How Players Account for Video Game Purchases. In *Convergence: The International Journal of Research into New Media Technologies*, 2019, Vol. 25, No. 5-6, p. 868-883.

25 MARKOVOVÁ, D.: Sběratelství jako intimní vztah člověka k věcem: Etnografický výzkum sběratelství každodennosti v jihozápadní Francii. In *Lidé Města*, 2018, Vol. 20, No. 3, p. 406. [online]. [2022-05-07]. Available at: <<https://lidemesta.cuni.cz/LM-1094-version1-markovova.pdf>>.

26 JONSON, M. R., LUO, Y.: Gaming-Value and Culture-Value: Understanding How Players Account for Video Game Purchases. In *Convergence: The International Journal of Research into New Media Technologies*, 2019, Vol. 25, No. 5-6, p. 870.

27 See: ŠEVČOVIČ, M.: *Konstituční poznatky o grafických technikách*. Bratislava : Comenius University, 2022.

When it comes to physical versions of digital games, there are a few variations that attract different kinds of collectors. For collectors, the most enticing are the titular collector's editions. They are produced in limited quantities, but contain a wide selection of physical bonuses in addition to the game itself. Naturally, these variants of games are much more expensive than the standard versions. Considering a product called a collector's edition, one might assume that they should be distributed physically. However, companies have been experimenting with many ways to omit the discs. There have even been cases of collector's editions without a game itself, such as *Wolfenstein: The New Order Panzerhund Edition*.<sup>28</sup> A more widespread trend has been to include a download code instead of a physical medium. Even this decision goes against the major principles of collecting (to own something tangible). For example, 343 Studios was criticised for their *Halo 5 Collector's Edition*; the criticism was so widespread that the company had to exchange the code for a physical disc for customers who were interested in it.<sup>29</sup> Collector's editions of digital games have been studied by multiple authors. Peters refers to the said material artefacts included in game packaging as "feelies" and explores their types and the ways players can interact with them.<sup>30</sup> Dunne further points out paratextual qualities of feelies, and explains how they can help the player by providing information or by conveying interaction impossible through the game itself (e.g., the texture and weight of a coin, replicating currency of the game it was bundled with). Dunne also points out that "(...) due to the increasing value of digital sales these physical manifestations of digital content have been increasingly considered premium content rather than a method of just representing the text".<sup>31</sup> This drives the digital games industry's focus towards digital sales; the business is straying away from physical items even further.

The most attainable variant of a digital game is a standard retail release. In the past, physical copies of games sold in retail stores usually came with the game itself, a box or plastic container and a manual. Contemporary mainstream releases omit manuals altogether, or replace them with advertisement leaflets and/or a single piece of paper containing copyright information. Nowadays, it is more common to find a short artbook included in the game case instead of the manual.<sup>32</sup> Some independent games still include instruction manuals, but more as a means to indulge nostalgia than as a necessity. Even standard retail releases are not equal in this sense. Some *niche* games are produced in lower quantities, as they target a much smaller and more focused customer base. These tend to become rare over time and thus may gain high monetary and collectors' value. On the other side of the spectrum, yearly releases that are most common for sports games lose their value as soon as their newer iterations are available.<sup>33</sup>

28 See: MAIBERG, E.: *Wolfenstein: The New Order Panzerhund Edition Comes with Everything but the Game*. Released on 26<sup>th</sup> March 2014. [online]. [2022-05-07]. Available at: <<https://www.pcgamer.com/wolfenstein-the-new-order-panzerhund-edition-comes-with-everything-but-the-game/>>; MACHINE GAMES: *Wolfenstein: The New Order*. [Digital game]. Rockville : Bethesda Softworks, 2020.

29 MCWHERTOR, M.: *Halo 5 Collector's Edition Buyers Can Exchange Their Digital Code for a Disc, 343 Confirms*. Released on 17<sup>th</sup> July 2015. [online]. [2022-05-07]. Available at: <<https://www.polygon.com/2015/7/17/8996889/halo-5-guardians-collectors-edition-physical-disc>>.

30 PETERS, I. M.: Peril-Sensitive Sunglasses, Superheroes in Miniature, and Pink Polka-Dot Boxers: Artifact and Collectible Video Game Feelies, Play, and the Paratextual Gaming Experience. In *Transformative Works and Cultures*, 2014, Vol. 16. No pagination. [online]. [2022-05-07]. Available at: <<https://journal.transformativeworks.org/index.php/twc/article/view/509>>.

31 DUNNE, D.: Paratext: The In-Between of Structure and Play. In DURET, C., PONS, C. M. (eds.): *Contemporary Research on Intertextuality in Video Games*. Hershey : IGI Global, 2016, p. 289-291.

32 Remark by authors: To exemplify the problem, many PlayStation 3 games still included lengthy manuals, e.g., 40-pages-long manual for *God of War 3* (Santa Monica Studios, 2011), 48 pages in the case of *Heavy Rain* (Quantic Dream, 2012), 26 pages attached to *Uncharted 3* (Naughty Dog, 2012, Czech distribution), or even 38-pages-long fully coloured manual for *Nier* (Square Enix, 2010). On the contrary, *Killzone Shadowfall* (Guerilla, 2013) that was packaged with the PlayStation 4 console only contains two leaflets with controller setup and an advertisement for the season pass, respectively. *Final Fantasy X X-2 HD Remaster* (Square Enix, 2015) only includes a product registration code for Square Enix loyalty programme and health and safety warning. *Crash Bandicoot 4: It's About Time* (Toys for Bob, 2020) and *Spyro Reignited Trilogy* (Toys for Bob, 2018) place health and safety warnings on the inside of the cover art and come with no inserts. *The Legend of Heroes: Trails of Cold Steel III* (Nihon Falcom, 2019), *Utawarerumono Prelude to the Fallen* (AqualPlus, 2020) and *Ys VIII Lacrimosa of Danan* (Nihon Falcom, 2017) in their initial print came bundled with a soundtrack CD and small artbook, but without any instruction manual.

33 Remark by authors: This discrepancy can be seen by comparing price differences between games from both categories released in the same time period. *Persona Q2 New Cinema Labyrinth* (Atlus, 2019), *Shin Megami Tensei: Strange Journey Redux* (Atlus, 2018) and *Fifa 2019*, *Fifa 20*, *NHL 2019*, *NHL 20* (EA, 2018, 2019) all came out within the same timeframe with international retail release. While games from Atlus maintained their prices to this day, or went up in monetary value, games from EA can be purchased within a single-digit sum, heavily under their 60 release-date price.

Considering these new strategies of releasing digital games, it is common that a game is not physically available at all. Many games consist of intangible data, being just binary systems with nothing material to show for their existence, with no tangible object for collectors to display. However, even digital data has become collectable in recent years, as shown in the article published by Mardon and Belk.<sup>34</sup> Players may choose to collect a wide variety of digital objects such as in-game characters (as seen in case of the *Pokémon* series), trading or collectable cards (e.g., *Hearthstone*, *Magic Arena*) or digital copies of games themselves, amassing sizable libraries on their platform of choice. One thing that should be taken into consideration is the longevity and ownership of such digital goods. The company may shut down, making the access to the content impossible. The service provider may end support for a selected game; the license to a game can be revoked by a platform holder; a user's account may get banned, which prevents them from accessing their collection. Outside of the above-mentioned shortcomings of digital ownership, many contemporary digital games are produced in accordance with the 'game as a service' paradigm.<sup>35</sup>

Bernevega et al. explain the ways digital games are being turned from commodities to assets by exploring the production of selected major Western developers. Games are no longer the property of the player; instead, they are owned by an "Internet landlord" who the players must pay to in order to access the content.<sup>36</sup> Nieborg and Poell further explore how modern AAA and free-to-play games became platform-dependent commodities.<sup>37</sup> With the digital games market taking the fully digital route, physical media are becoming obsolete. Games are being constantly updated and monetised post-release. Cloud-based gaming is attempting to solidify its foothold in the industry. Yet, not all the players and collectors are satisfied with this, and for several reasons as explained below.

## 4 Limited-Print Companies and Renaissance of Physical Media

The phenomenon we would like to address is a fairly recent practice. The emphasis is placed on the physical release of a game, which can involve both standard and collector's editions, which are available only for a limited time, or in a limited quantity for a specialised online retailer. Digital games of this kind can be seen as limited-print games, as a response to both growing digitalisation of the market and increase in numbers of digital games collectors.

Such items are developed and released by media organisations we may call 'limited-print companies'. Limited-print companies are a contemporary phenomenon and they are still small-scale companies, not massive conglomerates. These manufacturers and distributors apply different business practices. This chapter aims to identify the approaches that such limited-print companies adopt in order to preserve their competitiveness. We are primarily interested in the company Limited Run Games, as it is thought to be the pioneer of the limited-print game distribution model and it is currently the industry leader in the said field. Special Reserve Games is discussed as well; our intention is to compare the approaches applied by these companies. Other companies are mentioned to outline the current scope and significance of the given industry segment. They are either used to exemplify the current trends in the digital games industry that have led to the emergence of limited-print distribution and thus have had major influence on today's production and distribution system, or to explain the customers' present attitude towards the business decisions limited-print companies make. These cases are discussed to underline the scale of the topic and multitude of economic and sociocultural issues it touches.

34 See: MARDON, R., BELK, R.: Materializing Digital Collecting: An Extended View of Digital Materiality. In *Marketing Theory*, 2018, Vol. 18, No. 4, p. 543-570.

35 MACÁK, M.: Vývoj trendu „game as a service“ a jeho vplyv na japonskú digitálno-hernú sféru. In KVETANOVÁ, Z., GRACA, M. (eds.): *Megatrendy a médiá 2020: On the Edge*. Trnava : FMK UCM, 2020, p. 193-194.

36 See: BERNEVEGA, A., GEKKER, A.: The Industry of Landlords: Exploring the Assetization of the Triple-A Game. In *Games and Culture*, 2021, Vol. 17, No. 1, p. 47-69.

37 See also: NIEBORC, D. B., POELL, T.: The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity. In *New Media & Society*, 2018, Vol. 20, No. 11, p. 4275-4292.

With the influx of heavy digitalisation within the contemporary digital games industry, one could think that physical media as a form of data-holders for digital games are becoming obsolete. Personal computer as a gaming platform has already transformed into a digital-only environment. Even if a digital game is bought in a retail store, the box no longer contains a disc, but just a redeemable code accepted by one of the existing digital redistribution platforms. Although some sellers, such as GOG, provide the buyer with a DRM-free<sup>38</sup> version of the game, players would still lose access to their games if they did not download the necessary files in case of a service shutdown. As pointed out above, the console market is seemingly heading in the same direction. This results not only from the existence of digital storefronts associated with the gaming consoles, but also from various digital-only console variants that do not support any sort of physical media playback (PSP GO, Xbox One S All Digital, Xbox Series S, PlayStation 5 Digital Edition). Albeit it may seem that a digital-only future is inevitable, there are several contradictory facts to consider.

Naji and Abrahams in their article for *gameindustry.biz* contemplate the current state of physical media in terms of the digital games market. They state that despite investor predictions that digital games delivery will be more than 80% digital by 2025, the current trend is actively countering this. In Q4 of 2019, physical games accounted for 57% of sold units and with the release of new consoles in the form of PlayStation 5 and Xbox Series S/X, over 75% of sold consoles were the more expensive models allowing the players to play physical games.<sup>39</sup> The price difference between the console versions is approximately 100 euros, which is a significant gap, considering the console itself costs 400 to 500 euros. This shows that the interest in physical media is not as waning as some analytics predicted.

Another factor that is much more relevant for physical games collectors has appeared only recently. Multiple companies started their business by selling limited numbers of physical copies for otherwise digital-only, smaller releases. The starting point of this nowadays fairly widespread trend can be traced back to 2015, when the independent game development company Mighty Rabbit Studios attempted to release one of their games on physical media in limited quantity. Fairhurst, the founding member and current owner of Limited Run Games, explained in an interview that he is a passionate game collector, and that Limited Run Games is his way of fighting against an all-digital future. He also points out that having a game on a physical medium allows it to create its own legacy. On the other hand, digital-only games are often quickly forgotten. He also explained that the company's first game, *Breach and Clear*, was a market test. If these 1,500 produced copies were to sell out, it would prove to be a success and may gauge interest in other developers.<sup>40</sup> Their third released game, *Oddworld: New 'n' Tasty!*<sup>41</sup> was a remake of a PlayStation 1 cult-classic platformer, which may have helped the company to get the needed traction. Suffice to say, the experiment turned out to be a success beyond their initial expectations. Limited Run Games is currently the market leader in the segment of limited-production digital games, and the company has published games belonging to prominent franchises, such as *Scott Pilgrim*, *Castlevania* and *Star Wars*. Even though the whole project started as a simple resistance against the current trends expressed by an enthusiastic member of the games collecting fanbase, the number of successful projects<sup>42</sup> they have managed to release shows that the general interest in a physical medium as a collector's item still exists. Limited Run Games' products usually come with a few extras besides the game itself, such as a printed manual, trading cards and sometimes stickers. They also offer various collectors' editions of selected projects, which are bundled with memorabilia connected to the game.

Seeing that offering a limited number of physical copies of digital games is a viable market strategy, other companies soon followed with their own variations of similar services. The most notable is Special Reserve Games, which is in close relation with the publisher Devolver Digital and exclusively publishes physical

versions of games from Devolver Digital's catalogue. They publicly present themselves as a company that offers products based on high quality standards, and thus even the packaging contains various degrees of embossing and premium paper.<sup>43</sup> They have released physical copies of numerous highly acclaimed independent titles, such as *Gris*,<sup>44</sup> *Hotline Miami*<sup>45</sup> and *The Messenger*.<sup>46</sup> In contrast with their competition, they release less titles overall, but their selection is more focused.

The previously mentioned companies are both based in the USA, which can make purchasing their games in other parts of the world harder or more expensive, especially due to taxes and import fees. However, there are companies dealing with limited-print games in Europe and Asia as well. Notable Europe-based examples are Red Art Games and Strictly Limited Games. They both offer less known, smaller-scale games, most often with retro-inspired visual style, aimed at the *niche* hard-core audience. Strictly Limited has also recently partnered with various developers and publishers to distribute their games in the European region. Within the Asian territory, the most notable and interesting company is Play-Asia. They had operated on the gaming market long before limited-print games became popular. Their main focus has always been to provide imported Asian games and merchandise from various (mostly Japanese) pop-cultural franchises to the rest of the world, which they still do, even today. In addition to that, they have partnered with EastAsiaSoft to provide limited physical releases of their games.

All these releases are a great boon to digital games collectors and game preservation enthusiasts. Online storefronts are susceptible to shutdowns once they are no longer deemed profitable for the company. The latest shutdown performed by a major company happened in January 2019, with Nintendo disabling purchases via their Wii Shop Channel, a digital store offering retro games and smaller titles on Nintendo Wii.<sup>47</sup> While the Wii Shop Channel hosted only a small portion of *niche* titles, a much more impactful shutdown was announced by the PlayStation brand. In March 2021, Sony announced closure of their PlayStation 3 storefront by 10<sup>th</sup> July 2021 and PlayStation Vita by 27<sup>th</sup> August 2021.<sup>48</sup> This measure was later officially called off by the PlayStation CEO, Jim Ryan, alongside with a statement that they made the wrong decision.<sup>49</sup> With these platforms being much more digital-heavy than the aforementioned Nintendo Wii, players would not only lose their ability to purchase a majority of smaller-scale titles, but also downloadable content and expansion packs for their physical games, which started to spread during the era. Despite the intensive effort of Sony to abandon the platform, PlayStation Vita is still a living ecosystem, with games being developed for the hand-held. Many involved developers did not even get prior notice; some of them had their ongoing development projects aimed for the system still in production.<sup>50</sup> Even though the shutdown is postponed for now, it is uncertain for how long the store will remain online. Ryan sparked a bit of controversy with his statement in an interview for *Time* magazine, which shows his attitude towards PlayStation's legacy and preserving older titles: "*When we've dabbled with backwards compatibility, I can say it is one of those features that is much requested, but not actually used much. That, and I was at a Gran Turismo event recently where they had PS1, PS2, PS3 and PS4 games, and the PS1 and the PS2 games, they looked ancient, like why would anybody play this?*"<sup>51</sup>

Even if the whole storefront was not to be shutdown, there would always be an option to remove a title from the store. When such delisting happens, people who have already purchased the content can still re-download it, but no new purchases can be made, as the delisted content is taken away from the store. This can happen for a variety of reasons, but the most common one is expiration of a license. Many games based on pre-existing

38 Remark by authors: DRM-free versions are usually provided as installation files that do not require direct connection to the platform they were purchased on in order to function properly.

39 NAJI, S., ABRAHAMS, D.: *The Future Is Digital – Right? The Physical Format Faces Headwinds, But Will Its Demise Be Slower Than We Expect?* Released on 8<sup>th</sup> January 2021. [online]. [2022-05-07]. Available at: <<https://www.gamesindustry.biz/articles/2021-01-08-the-future-is-digital-right>>.

40 TREESE, T.: *Exclusive Interview: Josh Fairhurst Talks Limited Run Games*. Released on 15<sup>th</sup> October 2015. [online]. [2022-05-07]. Available at: <<https://wegotthiscovered.com/gaming/exclusive-interview-josh-fairhurst-talks-limited-run-games/>>.

41 JUST ADD WATER: *Oddworld: New 'n' Tasty!* [Digital game]. Berkeley: Oddworld Inhabitants, 2014.

42 Remark by authors: As of June 2021, Limited Run Games have published physical copies of over 500 unique titles in their Limited Run product line and a few dozen of games have been published through their distribution line.

43 *About.SRC.* [online]. [2022-05-07]. Available at: <<https://specialreservegames.com/about-srg/>>.

44 NOMADA STUDIO: *Gris*. [Digital game]. Austin: Devolver Digital, 2018.

45 DENNATON GAMES: *Hotline Miami*. [Digital game]. Austin: Devolver Digital, 2012.

46 SABOTAGE STUDIO: *The Messenger*. [Digital game]. Austin: Devolver Digital, 2018.

47 HOOD, V.: *Wii Shop Channel Shuts Down after 12 Years*. Released on 30<sup>th</sup> January 2019. [online]. [2022-05-07]. Available at: <<https://www.techradar.com/news/wii-shop-channel-shuts-down-after-12-years/>>.

48 SAED, S.: *Exclusive Interview: Josh Fairhurst Talks Limited Run Games*. Released on 30<sup>th</sup> March 2021. [online]. [2022-05-07]. Available at: <<https://www.vg247.com/2021/03/30/ps3-vita-psp-digital-store-shutdown-sony-confirmed/>>.

49 RYAN, J.: *PlayStation Store on PS3 and PS Vita Will Continue Operations*. Released on 19<sup>th</sup> April 2021. [online]. [2022-05-07]. Available at: <<https://blog.playstation.com/2021/04/19/playstation-store-on-ps3-and-ps-vita-will-continue-operations/>>.

50 SMITH, R.: *Not All PlayStation Vita Developers Were Told of the Store Closure, Several Games Now Cancelled*. Released on 30<sup>th</sup> March 2021. [online]. [2022-05-07]. Available at: <<https://www.playstationlifestyle.net/2021/03/30/playstation-vita-store-closure/>>.

51 PECKHAM, M.: *Everything Sony Told Us about the Future of PlayStation*. Released on 5<sup>th</sup> June 2017. [online]. [2022-05-07]. Available at: <<https://time.com/4804768/playstation-4-ps4-pro-psvr-sales/>>.

franchises have been taken down like this, such as *A. W. Phoenix Festa*<sup>52</sup> based on the eponymous animated series, *Deadpool*,<sup>53</sup> *Godzilla*,<sup>54</sup> various games featuring Marvel's characters, *Transformers: Devastation*,<sup>55</sup> etc. Sometimes this can also be caused by bankruptcy of the developer or publisher. After the company Telltale Games went into liquidation, most of their games were delisted from online platforms.<sup>56</sup> Some were later acquired by other companies and re-listed, but many of them are still unavailable. One of the most infamous 'delistings' in the recent years is *P. T.*<sup>57</sup> Although it was only a demo for the next instalment in the *Silent Hill* franchise, the demo itself is often cited as one of the best horror games ever made.<sup>58</sup> The game was supposed to be a collaboration effort between the producer Hideo Kojima and the movie director Guillermo del Toro. After company restructuring, Hideo Kojima left the company and the project was cancelled. Afterwards, *P. T.* itself was pulled down from the storefront and is no longer available for download even to players that have already downloaded it previously. There is currently no feasible way for people to play *P. T.*, besides purchasing a used console with the game installed. The delisting of games from digital storefronts has become so widespread that a dedicated website *delistedgames.com* is keeping track of these removed games, with the current count across all platforms currently being over 1,300.<sup>59</sup>

One of the games which were saved from 'extinction' was the aforementioned *Scott Pilgrim vs. The World: The Game*.<sup>60</sup> The game itself is considered to be one of the pinnacles of the *beat-em-up* genre, and as such it was heavily requested to be re-released after the initial delisting in December 2014.<sup>61</sup> The game received a complete collection for modern platforms, including all prior downloadable content, on January 2021. This was accompanied by a physical release provided by Limited Run Games, with both standard and collector's editions available.<sup>62</sup> With the existence of physical media, even if the game was to be delisted for the second time, players would still be able to purchase the disc or cartridge version from the second-hand market at any time.

These examples prove that physical media available on the digital games market are still an important factor for preservation, availability, longevity and mainly collectability of the media. But even when the way they are handled is well-meant, there are still many problems that arise from their limited physical availability.

## 5 Artificial Scarcity and Fear of Missing Out

This chapter takes a look at the negative impacts that are appearing on the current collector's market. As stated above, the positive impacts of releasing a physical version of a certain digital game, even if only in limited numbers, is undeniable. Such an approach can also have widespread downsides that may not be discernible at first glance. One of them is the titular limited availability. With a finite, pre-determined number of copies produced, there is usually a very small window to obtain a game at the retail price suggested by the manufacturer. Speaking from personal experience, games available through Limited Run Games with 1,500 to 5,000 produced copies are usually sold out in between two to five minutes. The moment when games become available is always explicitly stated within a reasonable timeframe beforehand, so potential buyers can

prepare to be online and ready to purchase the game. Nevertheless, any product available for purchase just for mere minutes cannot possibly be obtained by everyone interested in it. As such, the strategy for higher-profile titles sold through Limited Run Games has been altered to a system of open pre-orders. Instead of limited quantity, customers can pre-order an item within an allotted timeframe and once that time passes, the volume of games produced is based on the number of pre-orders. While this pre-order approach is by far more consumer-friendly, as games are available for weeks instead of minutes, it has created another problem. The shipping times were above average even before the change; now the purchased games can take over six months to arrive after paying for the order, as they are manufactured after the ordering window is closed. With alteration to the game data or manufacturing malfunctions, some games can even take over a year to get to the customer after the purchase.

Another aspect of limiting the production of certain titles to consider is the phenomenon known as "artificial scarcity": *"Artificial scarcity is a situation where individuals are hindered from accessing given sufficient resources or where the systems production potential is not fully used."*<sup>63</sup> Artificial scarcity is commonly associated with digitally distributed goods. The phenomenon is being explored by Mardon and Belk, who point out that products such as digital collectable cards are being sold in limited quantities even though there is nothing restricting their production, as any digital code is infinitely reproducible. The authors further address the problem through the titles *Habbo Hotel*,<sup>64</sup> where digital items are on sale for as little as two hours and in limited quantities, and *Pokémon GO*,<sup>65</sup> where some of the capturable Pokémon are restricted to selected real-world locations.<sup>66</sup> These strategies lead collectors of the said digital items towards impulsive buying decisions associated with seemingly rare items. They buy them as soon as possible, thinking these products may not be available again. Retail collectors' editions may seem like a type of item abusing artificial scarcity. However, in most cases, companies produce enough units to satisfy the demand for this extended edition, while standard editions of the title, containing the same core game, remain widely available. Even some games sold in retail stores, such as games created by *niche* developers, e.g., Atlus, Nihon Falcom or Nipon Ichi Software, get smaller scale print-runs, because the demand is lower compared to the mainstream AAA titles. Once the publisher deliberately decides not to satisfy the demand, even though there are many customers who would gladly pay for the product, the given strategy can be classified as creating artificial scarcity.

The concept of quantitative and time-based scarcity fits the business model of limited-print game publishing. Even from the said point of view, when it comes to limited-print digital games, the term "artificial" must be used carefully, as not every limited release creates artificial scarcity, and it is often the only way a certain game could feasibly be released on physical media. Despite that, there are cases when 'the system' is obviously abused to maximise profits through selecting this method of distribution; especially if the full retail release is within the scope of publishers. The aforementioned game *Scott Pilgrim vs. The World: The Game*<sup>67</sup> can serve as an example. The game has been requested to be re-released by fans for a long time, so the demand was already present. *Scott Pilgrim vs. The World: The Game* is not an independent title, but rather a product created and published by Ubisoft, one of the biggest digital game developers and publishers in the world.<sup>68</sup> Ubisoft could have afforded to release the new version of *Scott Pilgrim vs. The World: The Game* themselves, yet they chose to utilise Limited Run Games as their distributor and made the game (in its physical form) available only for a limited time. The same thing can be said about Konami and their way of handling the *Castlevania Anniversary Collection*,<sup>69</sup> a compilation of older titles from the *Castlevania* franchise. This release seems to be almost 'predatory', as other companies have already successfully released compilations of their other titles

52 APLUS: *A. W. Phoenix Festa*. [Digital game]. Tokyo : Bandai Namco, 2016.

53 HIGH MOON STUDIOS: *Deadpool*. [Digital game]. Santa Monica : Activision, 2013.

54 NATSUME: *Godzilla*. [Digital game]. Tokyo : Bandai Namco, 2014.

55 PLATINUM GAMES: *Transformers: Devastation*. [Digital game]. Santa Monica : Activision, 2015.

56 FUTTER, M.: *Telltale Games Is Closing, Liquidation Underway and Some Games Being Removed from Steam*. Released on 14<sup>th</sup> November 2018. [online]. [2022-05-07]. Available at: <<https://gamedaily.biz/article/385/telltale-games-is-closing-liquidation-underway-and-games-being-removed-from-steam>>.

57 KOJIMA PRODUCTIONS: *P.T.* [Digital game]. Tokyo : Konami, 2014.

58 O'BRIEN, L.: *My Game of the Year Wasn't a Game at All*. Released on 17<sup>th</sup> December 2014. [online]. [2022-05-07]. Available at: <<https://www.ign.com/articles/2014/12/17/my-game-of-the-year-wasn-t-a-game-at-all/>>.

59 *All Delisted Games*. [online]. [2022-05-07]. Available at: <<https://delistedgames.com/all-games/>>.

60 UBISOFT: *Scott Pilgrim vs. The World: The Game*. [Digital game]. Montreuil : Ubisoft, 2010.

61 GARVEY, M.: *Why Scott Pilgrim's Game Delisting Ultimately Benefits Ubisoft*. Released on 6<sup>th</sup> January 2021. [online]. [2022-05-07]. Available at: <<https://screenrant.com/scott-pilgrim-world-video-game-release-date-delisted/>>.

62 RALEIGH, N. C.: *Scott Pilgrim vs. The World: The Game – Complete Edition Rocks on with Upcoming Physical Release and New Game-Inspired Merchandise*. Released on 8<sup>th</sup> January 2021. [online]. [2022-05-07]. Available at: <<https://limitedrungames.com/blogs/news/scott-pilgrim-vs-the-world-the-game-complete-edition-rocks-on-with-upcoming-physical-release-and-new-game-inspired-merchandise>>.

63 DAOUD, A.: Scarcity and Artificial Scarcity. In COOK, D. T., RYAN, J. M. (eds.): *The Wiley Blackwell Encyclopedia of Consumption and Consumer Studies*. Hoboken : John Wiley & Sons, 2015, p. 489.

64 SULAKE: *Habbo Hotel*. [Digital game]. Helsinki : Sulake, 2020.

65 NIAN TIC: *Pokémon GO*. [Digital game]. San Francisco : Niantic, 2016.

66 MARDON, R., BELK, R.: Materializing Digital Collecting: An Extended View of Digital Materiality. In *Marketing Theory*, 2018, Vol. 18, No. 4, p. 551-555.

67 UBISOFT: *Scott Pilgrim vs. The World: The Game*. [Digital game]. Montreuil : Ubisoft, 2010.

68 *Top 25 Public Companies by Game Revenues*. [online]. [2022-05-07]. Available at: <<https://newzoo.com/insights/rankings/top-25-companies-game-revenues/>>.

69 KONAMI, M2: *Castlevania Anniversary Collection*. [Digital game]. Tokyo : Konami, 2019.

in the retail environment, namely *Mega Man Legacy Collection*<sup>70</sup> and *Collection of Mana*.<sup>71</sup> Both mentioned collections encompass a similar selection of titles from the same era and appeal to the same audience. While this strategy will not ensure higher sales in general, it will guarantee more purchases for the full initial price, as games sold in retail stores often offer significant discounts.

This negative impact of limited releases on human behaviour can also be reflected through referring to a psychosocial state commonly known as the Fear of Missing Out, popularly known as FOMO: “Defined as a pervasive apprehension that others might be having rewarding experiences from which one is absent, FOMO is characterized by the desire to stay continually connected with what others are doing.”<sup>72</sup> Even though it is most commonly associated with social media, the meaning can be applied to collectors of any sort – in this case we might observe the fear of not being able to add a selected game to one’s collection (for a reasonable price) and can be caused by the above-mentioned artificial scarcity. Many collectors of digital games are overwhelmed by the number of limited-print games released by different companies, yet they are afraid to miss out on the releases, as the games only get more expensive via second-hand sales after the initial print-run is sold out.<sup>73</sup> There have been a few cases of a second run for a limited-print game. Special Reserve Games did so with a few critically acclaimed titles.<sup>74</sup> The one to point out is *Gris*,<sup>75</sup> as the game has gotten heavy traction after the release for its unique visual style and innovative way to portray a female character. Thanks to the garnered attention, the demand for more copies was met.<sup>76</sup> Limited Run Games holds a yearly blowout sale, when they sell the remaining stock of games.<sup>77</sup> These, however, are just rare occasions and when the game sells out or the pre-order window closes, it is usually the end of production for that particular title.

On the other hand, there are games that have lost their ‘limited’ status, either through full retail release or release via a different distributor. The first notable release of this kind was *Söldner-X2: Final Prototype*<sup>78</sup> for PlayStation Vita. First released in 2016 by Limited Run Games with a print run of 3,200 copies,<sup>79</sup> it received another limited release restricted to 3,000 units by Play-Asia a year later.<sup>80</sup> Most of the games from publisher EastAsiaSoft have followed this pattern. While some may view this as lessening the collectors’ and financial value of the said items, the number of copies made is still relatively small to heavily alter the games’ overall value. An even more debatable phenomenon is the retail release of games previously available only through limited-print companies. From one perspective, if a game receives full retail release, the physical medium becomes more readily available to a much wider audience, thus it can be obtained and preserved by collectors quite easily. From the perspective of a collector, this may be seen as devaluation of one of their artefacts. Limited-print digital games have an inherent tendency to become overpriced on the second-hand market. From a certain standpoint, purchasing such a game can even be considered an investment. If a formerly rare digital game becomes widely available in its physical form, it will lessen the monetary (and, in many cases, collectable) value of the original issue. This practice mostly occurs due to releasing a retail version in European

or Asian regions, as the most prominent limited-print companies reside in North America. However, there is rarely a forward notice by developers or publishers when this is about to happen. One of the most infamous examples is the way *Streets of Rage 4*<sup>81</sup> was released. Limited Run Games release of the game was announced as having its pre-ordering phase open on 20<sup>th</sup> March 2020.<sup>82</sup> During the pre-order window, a European retail release was announced, along with a collector’s edition produced by *Signature Edition*.<sup>83</sup> Developer DotEmu later published a public apology on *Twitter*, stating that: “As is the case with many games releases, additional partnership for physical versions were arranged in the duration of development. These were primarily targeted to non-US customers, but in the process, we made mistakes in planning and we want to apologize. For clarity, Limited Run Games had no involvement with the other planned physical releases or timing.”<sup>84</sup>

As compensation, they added a bonus CD with a unique remix of the game’s soundtrack.<sup>85</sup> Other notable releases that received retail versions after initial limited-print ones were *Blasphemous*,<sup>86</sup> *Blaster Master Zero Trilogy*<sup>87</sup> (released separately by Limited Run Games), *Brigandine: The Legend of Runersia*,<sup>88</sup> *Celeste*,<sup>89</sup> *Fahrenheit: Indigo Prophecy*,<sup>90</sup> *Rabi-Ribi*,<sup>91</sup> *Ys Origin*,<sup>92</sup> etc. This proves that re-releasing a limited-print game as retail is not a solitary occurrence. The reasons behind this are not clear and may not be the same for all the publishers. They may gauge interest by releasing a preliminary limited-print, to follow it up with a retail release if enough copies are sold, or the demand for the game may be big enough to warrant such late retail release. The most unethical, but nonetheless logical reason may be that the companies aim to purposefully abuse ‘the system’ and take advantage of artificial scarcity to sell more initial copies at full price.

While the system of limited-print games helps with the physical preservation of digital games and functions as the driving force stimulating interest of the digital games collectors, the abusability of the system is undeniable. A game under the name of *Poop Slinger* and the way its physical release was handled can be pointed out as a fitting example. On 1<sup>st</sup> April 2019, a website *limitedraregames.com* was put up, selling the supposed 820 available units of the game.<sup>93</sup> The website had an amateurish-looking design, consisting only of plain text, a logo, a picture and a ‘Buy Now’ button with the list of available payment methods. A part of the text was also in Russian language. Considering the day on which it was published, it was considered as an April Fool’s joke and due to the website’s untrustworthy appearance, most people even thought it was a scam. As it turned out, however, those who took a risk and ordered the game actually received it. Supposedly, there were only 84 copies sold to the public, making it one of the rarest PlayStation 4 games.<sup>94</sup> According to the website *pricecharting.com*, copies of the game have already been sold for over 2,000 dollars.<sup>95</sup> This sets a dangerous precedent, as it promotes impulsive purchases from untrustworthy sources. Even though this solitary example actually fulfilled the given promise, due to its success, collectors now may be more likely to risk spending their money on a suspicious website, expressing their fear of missing out in relation to a supposedly ultra-rare game.

70 DIGITAL ECLIPSE: *Mega Man Legacy Collection*. [Digital game]. Osaka : Capcom, 2015.

71 M2, SQUARE ENIX: *Collection of Mana*. [Digital game]. Tokyo : Square Enix, 2019.

72 PRZYBYLSKI, A. K. et al.: Motivational, Emotional, and Behavioral Correlates of Fear of Missing Out. In *Computers in Human Behavior*, 2013, Vol. 29, No. 4, p. 1841.

73 See also: *Is Anyone Else Overwhelmed by All the Limited Print Publishers Putting Out Quality Titles?* Released on 26<sup>th</sup> May 2021. [online]. [2022-05-07]. Available at: <https://www.reddit.com/r/LimitedPrintGames/comments/nlmzht/is\_anyone\_else\_overwhelmed\_by\_all\_the\_limited/>; *Help Me Decide?* Released on 19<sup>th</sup> May 2021. [online]. [2022-05-07]. Available at: <https://www.reddit.com/r/LimitedPrintGames/comments/nkqdhm/help\_me\_decide/>; *Keeping Up with Game Releases and FOMO*. Released on 7<sup>th</sup> May 2021. [online]. [2022-05-07]. Available at: <https://www.reddit.com/r/LimitedPrintGames/comments/n6ta0f/keeping\_up\_with\_game\_releases\_and\_fomo/>.

74 *Your Lucky Number Is 4 #SRGSCS*. Released on 16<sup>th</sup> April 2021. [online]. [2022-05-07]. Available at: <https://twitter.com/specialreserves/status/1383087919179644932?s=21>.

75 NOMADA STUDIO: *Gris*. [Digital game]. Austin : Devolver Digital, 2018.

76 *We Knew GRIS Was Special Early: Since Our Reserve a Year Ago the Game’s Been Showered with Awards. Now We Want to Give All Its New Fans a Chance...* Released on 1<sup>st</sup> July 2020. [online]. [2022-05-07]. Available at: <https://twitter.com/specialreserves/status/1278324985765994496>.

77 *Blowout Sale 2021*. Released on 31<sup>st</sup> December 2020. [online]. [2022-05-07]. Available at: <https://limitedrungames.com/blogs/news/blowout-sale-2021>.

78 SIDEQUEST STUDIOS: *Söldner-X2: Final Prototype*. [Digital game]. Hong Kong : Eastasiasoft, 2010.

79 *Limited Run #13: Söldner-X 2: Final Prototype (Vita)*. [online]. [2022-05-07]. Available at: <https://limitedrungames.com/products/limited-run-13-soldner-x-2-final-prototype-vita>.

80 *Söldner-X 2: Final Prototype (Multi-Language)*. [online]. [2022-05-07]. Available at: <https://www.play-asia.com/sldner-x-2-final-prototype-multi-language/13/70am7p>.

81 DOTEMU: *Streets of Rage 4*. [Digital game]. Paris : DotEmu, 2020.

82 *Streets of Rage 4 from @Dotemu, @Lizardcube & @Guard Crush Gets a Limited Run on Friday, March 20. Standard and Classic Physical Editions Will Be Available to Pre-Order...* Released on 16<sup>th</sup> March 2020. [online]. [2022-05-07]. Available at: <https://twitter.com/LimitedRunGames/status/1239604898330816514>.

83 *Streets of Rage 4 – Signature Edition (PS4)*. [online]. [2022-05-07]. Available at: <https://signatureeditiongames.com/products/streets-of-rage-4-signature-edition-ps4>.

84 *Important Information Regarding Streets of Rage 4 Physical Editions by @LimitedRunGames*. Released on 12<sup>th</sup> May 2020. [online]. [2022-05-07]. Available at: <https://twitter.com/Dotemu/status/1260124403658043395>.

85 *Important Information Regarding Streets of Rage 4 Physical Editions by @LimitedRunGames*. Released on 12<sup>th</sup> May 2020. [online]. [2022-05-07]. Available at: <https://twitter.com/Dotemu/status/1260124403658043395>.

86 THE GAME KITCHEN: *Blasphemous*. [Digital game]. Wakefield : Team 17, 2019.

87 INTI CREATES: *Blaster Master Zero Trilogy*. [Digital game]. Ichikawa : Inti Creates, 2021.

88 MATRIX SOFTWARE: *Brigandine: The Legend of Runersia. (World-Wide Retail Release)*. [Digital game]. Tokyo : Happinet, 2020.

89 MATT MAKES GAMES: *Celeste*. [Digital game]. Vancouver : Matt Makes Games, 2018.

90 QUANTIC DREAM: *Fahrenheit: Indigo Prophecy (PlayStation 4 Re-Release)*. [Digital game]. Paris : Quantic Dream, 2016.

91 CRESPIRIT: *Rabi-Ribi*. [Digital game]. Los Angeles : Sekai Project, 2016.

92 NIHON FALCOM: *Ys Origin (8<sup>th</sup> Generation Console Release)*. [Digital game]. Paris : DotEmu, 2017-2020.

93 *Limited Rare Games Poop Slinger*. [online]. [2022-05-07]. Available at: <http://web.archive.org/web/20190401222837/http://limitedraregames.com/>.

94 BROWN, R.: *The Rarest PS4 Game Is Called Poop Slinger – and It Supposedly Bankrupted a Company*. Released on 24<sup>th</sup> April 2019. [online]. [2022-05-07]. Available at: <https://www.vg247.com/2019/04/24/rarest-ps4-game-poop-slinger/>.

95 *Price Charting Poop Slinger PlayStation 4*. [online]. [2022-05-07]. Available at: <https://www.pricecharting.com/game/playstation-4/poop-slinger#completed-auctions-new>.

The most recent questionable use of the limited-print system is associated with the release of the game *Demon Throttle*<sup>96</sup> that will not receive a digital release. Even though the announcement during Devolver Digital's humorous E3 showcase on 12<sup>th</sup> June 2021 was presented as a parody reacting to the current digital games industry trends,<sup>97</sup> so far it seems that the game will indeed be released only as a physical product through their Special Reserve Games distribution line. While it may be considered as a sort of counter-culture to the ever-growing digitalisation of the medium, or a statement on the state of the industry, it undeniably creates artificial scarcity. Even the above-mentioned *Poop Slinger* can be purchased digitally for 5 dollars,<sup>98</sup> so potential players are able to purchase it at an affordable price as long as it remains available on the storefront. *Demon Throttle*, on the other hand, was artificially created to be rare. Even the storefront website informs, in bold red capital letters, that the game is "SRG EXCLUSIVE – ONLY PHYSICAL, NEVER DIGITAL".<sup>99</sup> A similar project had been announced a day before by Super Rare Games. The label is called Super Rare Shorts and it is supposed to be a series of physical-only releases, but the only thing known so far is one of the participating publishers, Glass Revolver.<sup>100</sup> This will undeniably increase sales, just for the sake of rarity alone. Due to the fear of missing out, it is likely that many people, some of them not even interested in the game itself, will purchase it, just to add it to their collection. They will likely want to get the game in the only possible way it can be obtained. Super Rare Games responded to the criticism shortly after the initial announcement and not only clarified a few unclear details, but partially reverted the decision to keep those games in physical format only. They will be available digitally six months after their release, albeit on a different platform, *itch.io*, and not on Nintendo Switch.<sup>101</sup> The case of *Demon Throttle* and Super Rare Games is still recent, but it will be interesting to follow it in the future, as it breaks the industry's standards of digital releases, but also artificially creates problems that do not have to exist.

## 6 Conclusion: Reflecting on What Cannot Be Avoided

The market for limited-print digital games has been steadily growing since its infancy in 2015. Thanks to these companies, many critically acclaimed, culturally significant and creatively unique titles have been released on physical media that can help preserve them once the inevitable shutdown of digital storefronts will come. It also provides collectors with games they would otherwise not be able to obtain in the physical form. The developers, who cannot afford full-retail physical release, can use these services to provide their fans with a way to obtain hard copies of their games. Most importantly, they are showing the industry that interest in the physical copies of digital games is still present and thriving. However, they have to face a wide spectrum of problems inherent to this business strategy.

The most prevalent issue connected with limited-print games are scalpers and scalping. Scalpers buy goods that they think could become scarce and then resell them at a significantly increased price. Their adverse effect is quite noticeable, especially in relation to products with a clearly limited quantity. In the academic circles, pathological manifestations of such behaviour are examined in relation to ticket re-sellers offering

96 DOINKSOFT: *Demon Throttle*. [Digital game]. Austin : Devolver Digital, 2022.

97 DEVOLVERDIGITAL: "Devolver MaxPass+ Showcase | Monetization as a Service". Released on 12<sup>th</sup> June 2021. [online]. [2022-05-07]. Available at: <<https://www.youtube.com/watch?v=viojUZAgS5w>>.

98 PlayStation Store *Poop Slinger*. [online]. [2022-05-07]. Available at: <[https://store.playstation.com/en-us/product/UP3995-CUSA12756\\_00-POOPLINGER18PS4](https://store.playstation.com/en-us/product/UP3995-CUSA12756_00-POOPLINGER18PS4)>.

99 *Demon Throttle [Switch Single]*. [online]. [2022-05-07]. Available at: <<https://specialreservegames.com/demon-throttle-switch-single/>>.

100 *Announcing Super Rare Shorts – Our New Label for Physical-Only Releases! That's Right – Exclusive Games NEVER Released Digitally, Only Available Physically...* Released on 11<sup>th</sup> June 2021. [online]. [2022-05-07]. Available at: <<https://twitter.com/SuperRareGames/status/1403396618334838785>>.

101 *Super Rare Shorts! We Listened to Your Feedback Regarding Our 'Physical-Only' Games and We Agree. Sorry for Failing to Communicate Our Ideas Properly...* Released on 14<sup>th</sup> June 2021. [online]. [2022-05-07]. Available at: <<https://twitter.com/SuperRareGames/status/1404472109884116995>>.

access to concerts, prominent sporting events or other cultural affairs.<sup>102</sup> As limited-print games are marketed as goods with a restricted number of units (copies), scalping is not an option, but rather an inevitability. Even though not directly connected with limited-print games, scalpers abused shortages of the newest gaming consoles PlayStation 5 and Xbox Series X/S to such an extent that the given consoles were not available to be purchased in stores even six months after their release in November 2020. This problem is becoming so serious that the British Parliament is proposing legislative action directly against such traffickers.<sup>103</sup> This may directly affect the second-hand market of limited-print games, and as such, investigating the situation in the future is not only highly advisable, but rather necessary.

Artificial scarcity of these products is also problematic, albeit highly debatable. It should be considered on a case-by-case basis. While some games would never have received physical release without the help of limited-print publishers, it is apparent that some higher-profile publishers (such as Ubisoft and Konami) profit from the guaranteed sales this business strategy provides. While the open pre-order system has elevated the scarcity to some extent, a month of availability is still a highly limiting window to obtain any product. The latest aspect that can be attributed to creating artificial scarcity is physical-only release through these storefronts. Most of the titles are available digitally for the time being, but physical-only limited-print games will become unavailable outside of the secondary market as soon as the pre-order window (which is supposed to be online only for a few months) closes. This approach utilises the fear of missing out by creating a product exclusively tied not only to a singular retailer, but also to a specific timeframe. Even though the choice to omit the digital platforms altogether may be interpreted as an act of resistance against the aggressive digitalisation of the market, it is much more likely that the true reason for this choice is solely based on the potential short-term profit it could bring.

Acting as the counterpoint to the problem of artificial scarcity, the rarity and collectors' value of these games can be compromised by multiple re-releases, or even by full retail releases of certain titles. These re-releases, however, make the games available to broader audiences and can be used to satiate increased demand. Even when the possible negative and abusible aspects of limited-print games are considered, they still provide a significant resource to digital-game collectors when it comes to independent titles or small-scale releases. While limited-print games may be seen as prestigious collectable items, they are still, first and foremost, playable digital games. Re-releases of said games may bring down the short-term financial value of the given games, but they allow more collectors to obtain a title that may have become sought after past its original release.

Limited-print games may be seen as an opposing reaction to encroaching on the digital-only era for digital games, attracting the attention of systematic collectors. In the age of constant updates, patches and games made as an ever-continuing service, they provide players and collectors with a sense of finality and closure. The game distributed on a disc or cartridge from a limited-print company is, in most cases, a finished product. Given the analysis of the said phenomenon, it is safe to assume that limited-print games have already made an imprint on the digital games market and have become 'a staple' for digital games collectors, as well as an ambivalent, yet indisputable sign of resistance against an all-digital future.

*Acknowledgement: The study was elaborated within the national research project supported by the Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences (VEGA) No. 1/0283/20, titled 'Synergy of the Media Industry Segments in the Context of Critical Political Economy of Media'.*

102 See: BOZEMAN, B., TAGGART, G.: A Participant-Observation Study of 'Coopetition' among Baseball Ticket Scalpers. In *Sociological Inquiry*, 2018, Vol. 88, No. 3, p. 535-558; KARP, L., PERLOFF, J.: When Promoters Like Scalpers. In *Journal of Economics & Management Strategy*, 2005, Vol. 14, No. 2, p. 477-508. [online]. [2022-05-07]. Available at: <<http://editjems.org/article-item/when-promoters-like-scalpers/>>.

103 GAMECENTRAL.: *UK Politicians Suggest New Law to Stop PS5 and Xbox Series X Scalpers*. Released on 16<sup>th</sup> December 2020. [online]. [2022-05-07]. Available at: <<https://metro.co.uk/2020/12/16/uk-politicians-suggest-new-law-to-stop-ps5-and-xbox-series-x-scalpers-13761482/>>.



## BIBLIOGRAPHY:

ABOUT SRG. [online]. [2022-05-07]. Available at: <<https://specialreservegames.com/about-srg/>>.

ALL DELISTED GAMES. [online]. [2022-05-07]. Available at: <<https://delistedgames.com/all-games>>.

ANNOUNCING SUPER RARE SHORTS – OUR NEW LABEL FOR PHYSICAL-ONLY RELEASES! THAT'S RIGHT – EXCLUSIVE GAMES NEVER RELEASED DIGITALLY, ONLY AVAILABLE PHYSICALLY.... Released on 11<sup>th</sup> June 2021. [online]. [2022-05-07]. Available at: <<https://twitter.com/SuperRareGames/status/1403396618334838785>>.

APLUS: *A. W. Phoenix Festa*. [Digital game]. Tokyo : Bandai Namco, 2016.

BARWICK, J., DEARNLEY, J., MUIR, A.: Playing Games with Cultural Heritage: A Comparative Case Study Analysis of the Current Status of Digital Game Preservation. In *Games and Culture*, 2011, Vol. 6, No. 4, p. 373-390. ISSN 1555-4120.

BAILEY, J. M.: *Collectors Are Spending Thousands on Video Games They Will Never Play*. Released on 27<sup>th</sup> January 2020. [online]. [2022-05-07]. Available at: <<https://www.nytimes.com/2020/01/27/business/video-games-wata-heritage.html>>.

BENJAMIN, W.: *Illuminations: Essays and Reflections (collected by Hannah Arendt)*. New York : Schocken Books, 1999.

BERNEVEGA, A., GEKKER, A.: The Industry of Landlords: Exploring the Assetization of the Triple-A Game. In *Games and Culture*, 2021, Vol. 17, No. 1, p. 47-69. ISSN 1555-4120.

BLOWOUT SALE 2021. Released on 31<sup>st</sup> December 2020. [online]. [2022-05-07]. Available at: <<https://limitedrungames.com/blogs/news/blowout-sale-2021>>.

BOZEMAN, B., TAGGART, G.: A Participant-Observation Study of 'Coopetition' among Baseball Ticket Scalpers. In *Sociological Inquiry*, 2018, Vol. 88, No. 3, p. 535-558. ISSN 0038-0245.

BROWN, R.: *The Rarest PS4 Game Is Called Poop Slinger – and It Supposedly Bankrupted a Company*. Released on 24<sup>th</sup> April 2019. [online]. [2022-05-07]. Available at: <<https://www.vg247.com/2019/04/24/rarest-ps4-game-poop-slinger/>>.

CHEN, G.: *PlayStation Store Update*. Released on 16<sup>th</sup> December 2014. [online]. [2022-05-07]. Available at: <<https://blog.playstation.com/2014/12/16/playstation-store-update-373/>>.

CRESPiRiT: *Rabi-Ribi*. [Digital game]. Los Angeles : Sekai Project, 2016.

DAOUD, A.: Scarcity and Artificial Scarcity. In COOK, D. T., RYAN, J. M. (eds.): *The Wiley Blackwell Encyclopedia of Consumption and Consumer Studies*. Hoboken : John Wiley & Sons, 2015, p. 489-491.

DEMON THROTTLE [Switch Single]. [online]. [2022-05-07]. Available at: <<https://specialreservegames.com/demon-throttle-switch-single/>>.

DENNATON GAMES: *Hotline Miami*. [Digital game]. Austin : Devolver Digital, 2012.

DEVOLVERDIGITAL: “Devolver MaxPass+ Showcase | Monetization as a Service”. Released on 12<sup>th</sup> June 2021. [online]. [2022-05-07]. Available at: <<https://www.youtube.com/watch?v=viojUZ4gS5w>>.

DIGITAL ECLIPSE: *Mega Man Legacy Collection*. [Digital game]. Osaka : Capcom, 2015.

DOINKSOFT: *Demon Throttle*. [Digital game]. Austin : Devolver Digital, 2022.

DOTEMU: *Streets of Rage 4*. [Digital game]. Paris : DotEmu, 2020.

DUNNE, D.: Paratext: The In-Between of Structure and Play. In DURET, C., PONS, C. M. (eds.): *Contemporary Research on Intertextuality in Video Games*. Hershey : IGI Global, 2016, p. 274-296.

FUTTER, M.: *Telltale Games Is Closing, Liquidation Underway and Some Games Being Removed from Steam*. Released on 14<sup>th</sup> November 2018. [online]. [2022-05-07]. Available at: <<https://gamedaily.biz/article/385/telltale-games-is-closing-liquidation-underway-and-games-being-removed-from-steam>>.

GAMECENTRAL.: *UK Politicians Suggest New Law to Stop PS5 and Xbox Series X Scalpers*. Released on 16<sup>th</sup> December 2020. [online]. [2022-05-07]. Available at: <<https://metro.co.uk/2020/12/16/uk-politicians-suggest-new-law-to-stop-ps5-and-xbox-series-x-scalpers-13761482/>>.

GAME REPUBLIC: *Folklore*. [Digital game]. Tokyo : Sony Computer Entertainment, 2007.

GARDA, M. B. et al.: From Cultural Sustainability to Culture of Sustainability: Preservation of Games in the Context of Digital Materiality. In *Proceedings of DiGRA 2020*, 2020, Vol. 15, No. 1, p. 1-15. ISSN 2342-9666. [online]. [2022-04-29]. Available at: <[http://www.digra.org/wp-content/uploads/digital-library/DiGRA\\_2020\\_paper\\_438.pdf](http://www.digra.org/wp-content/uploads/digital-library/DiGRA_2020_paper_438.pdf)>.

GARVEY, M.: *Why Scott Pilgrim's Game Delisting Ultimately Benefits Ubisoft*. Released on 6<sup>th</sup> January 2021. [online]. [2022-05-07]. Available at: <<https://screenrant.com/scott-pilgrim-world-video-game-release-date-delisted/>>.

GERAGHTY, L.: *Cult Collectors*. Abingdon-on-Thames : Routledge, 2014.

GUINS, R.: *Game After: A Cultural Study of Video Game Afterlife*. Massachusetts : The MIT Press, 2014.

HELP ME DECIDE? Released on 19<sup>th</sup> May 2021. [online]. [2022-05-07]. Available at: <[https://www.reddit.com/r/LimitedPrintGames/comments/nfqdhn/help\\_me\\_decide/](https://www.reddit.com/r/LimitedPrintGames/comments/nfqdhn/help_me_decide/)>.

HIGH MOON STUDIOS: *Deadpool*. [Digital game]. Santa Monica : Activision, 2013.

HILLS, M. C.: *Why Your Old Video Games May Be Worth Millions*. Released on 16<sup>th</sup> August 2021. [online]. [2022-05-07]. Available at: <<https://edition.cnn.com/style/article/most-expensive-video-games/index.html>>.

HOOD, V.: *Wii Shop Channel Shuts Down after 12 Years*. Released on 30<sup>th</sup> January 2019. [online]. [2022-05-07]. Available at: <<https://www.techradar.com/news/wii-shop-channel-shuts-down-after-12-years/>>.

HOSOI, K., MACÁK, M.: Preserving Japan: Saving Digital Games for Future Generations. Interview with Koichi Hosoi. In *Acta Ludologica*, 2021, Vol. 4, No. 1, p. 124-130. ISSN 2585-8599.

IMPORTANT INFORMATION REGARDING STREETS OF RAGE 4 PHYSICAL EDITIONS BY @LIMITEDRUNGAMES. Released on 12<sup>th</sup> May 2020. [online]. [2022-05-07]. Available at: <<https://twitter.com/Dotemu/status/1260124403658043395>>.

INTI CREATES: *Blaster Master Zero Trilogy*. [Digital game]. Ichikawa : Inti Creates, 2021.

IS ANYONE ELSE OVERWHELMED BY ALL THE LIMITED PRINT PUBLISHERS PUTTING OUT QUALITY TITLES? Released on 26<sup>th</sup> May 2021. [online]. [2022-05-07]. Available at: <[https://www.reddit.com/r/LimitedPrintGames/comments/nlmzht/is\\_anyone\\_else\\_overwhelmed\\_by\\_all\\_the\\_limited/](https://www.reddit.com/r/LimitedPrintGames/comments/nlmzht/is_anyone_else_overwhelmed_by_all_the_limited/)>.

JONSON, M. R., LUO, Y.: Gaming-Value and Culture-Value: Understanding How Players Account for Video Game Purchases. In *Convergence: The International Journal of Research into New Media Technologies*, 2019, Vol. 25, No. 5-6, p. 868-883. ISSN 1354-8565.

JUST ADD WATER: *Oddworld: New 'n' Tasty!* [Digital game]. Berkeley : Oddworld Inhabitants, 2014.

KABÁT, M.: Editorial: One Does Not Simply Buy a Game Anymore. In *Acta Ludologica*, 2019, Vol. 2, No. 1, p. 2. ISSN 2585-8599.

KARP, L., PERLOFF, J.: When Promoters Like Scalpers. In *Journal of Economics & Management Strategy*, 2005, Vol. 14, No. 2, p. 477-508. ISSN 1530-9134. [online]. [2022-05-07]. Available at: <<http://editjems.org/article-item/when-promoters-like-scalpers/>>.

KEEPING UP WITH GAME RELEASES AND FOMO. Released on 7<sup>th</sup> May 2021. [online]. [2022-05-07]. Available at: <[https://www.reddit.com/r/LimitedPrintGames/comments/n6ta0f/keeping\\_up\\_with\\_game\\_releases\\_and\\_fomo/](https://www.reddit.com/r/LimitedPrintGames/comments/n6ta0f/keeping_up_with_game_releases_and_fomo/)>.

KOJIMA PRODUCTIONS: *Metal Gear Solid 4: Guns of Patriots*. [Digital game]. Tokyo : Konami, 2008.

KOJIMA PRODUCTIONS: *P.T.* [Digital game]. Tokyo : Konami, 2014.

KONAMI, M2: *Castlevania Anniversary Collection*. [Digital game]. Tokyo : Konami, 2019.

LIMITED RARE GAMES POOP SLINGER. [online]. [2022-05-07]. Available at: <<http://web.archive.org/web/20190401222837/http://limitedraregames.com/>>.

LIMITED RUN #13: *Söldner-X 2: Final Prototype (Vita)*. [online]. [2022-05-07]. Available at: <<https://limitedrungames.com/products/limited-run-13-soldner-x-2-final-prototype-vita>>.

M2, SQUARE ENIX: *Collection of Mana*. [Digital game]. Tokyo : Square Enix, 2019.

MAALSEN, S., MCLEAN, J.: Record Collections as Musical Archives: Gender, Record Collecting, and Whose Music Is Heard. In *Journal of Material Culture*, 2017, Vol. 23, No. 1, p. 39-57. ISSN 1359-1835.

MACÁK, M.: Vývoj trendu „game as a service“ a jeho vplyv na japonskú digitálno-hernú sféru. In KVETANOVÁ, Z., GRACA, M. (eds.): *Megatrendy a médiá 2020: On the Edge. Conference Proceedings*. Trnava : FMK UCM, 2020, p. 193-206.

MACHINE GAMES: *Wolfenstein: The New Order*. [Digital game]. Rockville : Bethesda Softworks, 2020.

MAIBERG, E.: *Wolfenstein: The New Order Panzerhund Edition Comes with Everything but the Game*. Released on 26<sup>th</sup> March 2014. [online]. [2022-05-07]. Available at: <<https://www.pcgamer.com/wolfenstein-the-new-order-panzerhund-edition-comes-with-everything-but-the-game/>>.

MARDON, R., BELK, R.: Materializing Digital Collecting: An Extended View of Digital Materiality. In *Marketing Theory*, 2018, Vol. 18, No. 4, p. 543-570. ISSN 1470-5931.

MARKOVOVÁ, D.: SbĚratelství jako intimní vztah člověka k věcem: Etnografický výzkum sbĚratelství každodennosti v jihozápadní Francii. In *Lidé Města*, 2018, Vol. 20, No. 3, p. 387-409. ISSN 1212-8112. [online]. [2022-05-07]. Available at: <<https://lidemesta.cuni.cz/LM-1094-version1-markovova.pdf>>.

MATT MAKES GAMES: *Celeste*. [Digital game]. Vancouver : Matt Makes Games, 2018.

MATRIX SOFTWARE: *Brigandine: The Legend of Runersia. (World-Wide Retail Release)* [Digital game]. Tokyo : Happinet, 2020.

MCWHERTOR, M.: *Halo 5 Collector's Edition Buyers Can Exchange Their Digital Code for a Disc, 343 Confirms*. Released on 17<sup>th</sup> July 2015. [online]. [2022-05-07]. Available at: <<https://www.polygon.com/2015/7/17/8996889/halo-5-guardians-collectors-edition-physical-disc>>.

NAJI, S., ABRAHAMS, D.: *The Future Is Digital – Right? The Physical Format Faces Headwinds, But Will Its Demise Be Slower Than We Expect?* Released on 8<sup>th</sup> January 2021. [online]. [2022-05-07]. Available at: <<https://www.gamesindustry.biz/articles/2021-01-08-the-future-is-digital-right>>.

NATSUME: *Godzilla*. [Digital game]. Tokyo : Bandai Namco, 2014.

NIANTIC: *Pokémon GO*. [Digital game]. San Francisco : Niantic, 2016.

NIEBORG, D. B., POELL, T.: The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity. In *New Media & Society*, 2018, Vol. 20, No. 11, p. 4275-4292. ISSN 1461-4448.

NIHON FALCOM: *Ys Origin (8<sup>th</sup> Generation Console Release)*. [Digital game]. Paris : DotEmu, 2017-2020.

NINJA THEORY: *Heavenly Sword*. [Digital game]. Tokyo : Sony Computer Entertainment, 2007.

Nintendo Aims High with 'Satellaview'. In *NEXT Generation*, 1995, Vol. 1, No. 5, p. 18-19. ISSN 1078-9693.

NOMADA STUDIO: *Gris*. [Digital game]. Austin : Devolver Digital, 2018.

O'BRIEN, L.: *My Game of the Year Wasn't a Game at All*. Released on 17<sup>th</sup> December 2014. [online]. [2022-05-07]. Available at: <<https://www.ign.com/articles/2014/12/17/my-game-of-the-year-wasnt-a-game-at-all/>>.

PEARCE, S.: *On Collecting: An Investigation into Collecting in the European Tradition*. Abingdon-on-Thames : Routledge, 1995.

PECKHAM, M.: *Everything Sony Told Us about the Future of PlayStation*. Released on 5<sup>th</sup> June 2017. [online]. [2022-05-07]. Available at: <<https://time.com/4804768/playstation-4-ps4-pro-psvr-sales/>>.

PETERS, I. M.: Peril-Sensitive Sunglasses, Superheroes in Miniature, and Pink Polka-Dot Boxes: Artifact and Collectible Video Game Feelies, Play, and the Paratextual Gaming Experience. In *Transformative Works and Cultures*, 2014, Vol. 16. No pagination. ISSN 1941-2258. [online]. [2022-05-07]. Available at: <<https://journal.transformativeworks.org/index.php/twc/article/view/509>>.

PLATINUM GAMES: *Transformers: Devastation*. [Digital game]. Santa Monica : Activision, 2015.

POMIAN, K.: *Collectors and Curiosities*. Cambridge : Polity Press, 2014.

*PlayStation Store Poop Slinger*. [online]. [2022-05-07]. Available at: <[https://store.playstation.com/en-us/product/UP3995-CUSA12756\\_00-POOPLINGER18PS4](https://store.playstation.com/en-us/product/UP3995-CUSA12756_00-POOPLINGER18PS4)>.

*Price Charting Poop Slinger PlayStation 4*. [online]. [2022-05-07]. Available at: <<https://www.pricecharting.com/game/playstation-4/poop-slinger#completed-auctions-new>>.

PRZYBYLSKI, A. K. et al.: Motivational, Emotional, and Behavioral Correlates of Fear of Missing Out. In *Computers in Human Behavior*, 2013, Vol. 29, No. 4, p. 1841-1848. ISSN 0747-5632.

QUANTIC DREAM: *Fahrenheit: Indigo Prophecy (PlayStation 4 Re-Release)*. [digital game]. Paris : Quantic Dream, 2016.

RALEIGH, N. C.: *Scott Pilgrim vs. The World: The Game – Complete Edition Rocks on with Upcoming Physical Release and New Game-Inspired Merchandise*. Released on 8<sup>th</sup> January 2021. [online]. [2022-05-07]. Available at: <<https://limitedrungames.com/blogs/news/scott-pilgrim-vs-the-world-the-game-complete-edition-rocks-on-with-upcoming-physical-release-and-new-game-inspired-merchandise>>.

RYAN, J.: *PlayStation Store on PS3 and PS Vita Will Continue Operations*. Released on 19<sup>th</sup> April 2021. [online]. [2022-05-07]. Available at: <<https://blog.playstation.com/2021/04/19/playstation-store-on-ps3-and-ps-vita-will-continue-operations/>>.

SABOTAGE STUDIO: *The Messenger*. [Digital game]. Austin : Devolver Digital, 2018.

SAED, S.: *Exclusive Interview: Josh Fairhurst Talks Limited Run Games*. Released on 30<sup>th</sup> March 2021. [online]. [2022-05-07]. Available at: <<https://www.vg247.com/2021/03/30/ps3-vita-psp-digital-store-shutdown-sony-confirmed/>>.

SIDEQUEST STUDIOS: *Söldner-X 2: Final Prototype*. [Digital game]. Hong Kong : Eastasiasoft, 2010.

SILICON STUDIO: *3D Dot Game Heroes*. [Digital game]. Tokyo : Atlus, 2009.

SMITH, R.: *Not All PlayStation Vita Developers Were Told of the Store Closure, Several Games Now Cancelled*. Released on 30<sup>th</sup> March 2021. [online]. [2022-05-07]. Available at: <<https://www.playstationlifestyle.net/2021/03/30/playstation-vita-store-closure/>>.

*Söldner-X 2: Final Prototype (Multi-Language)*. [online]. [2022-05-07]. Available at: <<https://www.play-asia.com/sldner-x-2-final-prototype-multi-language/13/70am7p>>.

SQUARE ENIX: *Final Fantasy XIII*. [Digital game]. Tokyo : Square Enix, 2009.

*Streets of Rage 4 – Signature Edition (PS4)*. [online]. [2022-05-07]. Available at: <<https://signatureeditiongames.com/products/streets-of-rage-4-signature-edition-ps4>>.

*Streets of Rage 4 from @Dotemu, @Lizardcube & @Guard\_Crush Gets a Limited Run on Friday, March 20. Standard and Classic Physical Editions Will Be Available to Pre-Order...* Released on 16<sup>th</sup> March 2020. [online]. [2022-05-07]. Available at: <<https://twitter.com/LimitedRunGames/status/1239604898330816514>>.

SULAKE: *Habbo Hotel*. [Digital game]. Helsinki : Sulake, 2020.

*Super Rare Shorts! We Listened to Your Feedback Regarding Our 'Physical-Only' Games and We Agree. Sorry for Failing to Communicate Our Ideas Properly...* Released on 14<sup>th</sup> June 2021. [online]. [2022-05-07]. Available at: <<https://twitter.com/SuperRareGames/status/1404472109884116995>>.

ŠEVČOVIČ, M.: *Konstitúívne poznatky o grafických technikách*. Bratislava : Comenius University, 2022.

ŠVELCH, J.: Resisting the Perpetual Update: Struggles against Protocological Power in Video Games. In *New Media & Society*, 2019, Vol. 21, No. 7, p. 1594-1612. ISSN 1461-4448.

THE GAME KITCHEN: *Blasphemous*. [Digital game]. Wakefield : Team17, 2019.

*Top 25 Public Companies by Game Revenues*. [online]. [2022-05-07]. Available at: <<https://newzoo.com/insights/rankings/top-25-companies-game-revenues/>>.

TOYS FOR BOB: *Crash Bandicoot 4: It's about Time*. [Digital game]. Santa Monica : Activision, 2020.

TREESE, T.: *Exclusive Interview: Josh Fairhurst Talks Limited Run Games*. Released on 15<sup>th</sup> October 2015. [online]. [2022-05-07]. Available at: <<https://wegotthiscovered.com/gaming/exclusive-interview-josh-fairhurst-talks-limited-run-games/>>.

UBISOFT: *Scott Pilgrim vs. The World: The Game*. [Digital game]. Montreuil : Ubisoft, 2010.

*We Knew GRIS Was Special Early. Since Our Reserve a Year Ago the Game's Been Showered with Awards. Now We Want to Give All Its New Fans a Chance...* Released on 1<sup>st</sup> July 2020. [online]. [2022-05-07]. Available at: <<https://twitter.com/specialreserves/status/1278324985765994496>>.

WINGET, M. A., MURRAY, C.: Collecting and Preserving Videogames and Their Related Materials: A Review of Current Practice, Game-Related Archives and Research Projects. In *Proceedings of the American Society for Information Science and Technology*, 2008, Vol. 45, No. 1, p. 1-9. ISSN 1550-8390.

WOOD, K., CARTER, D. S.: Art and Technology: Archiving Video Games for Humanities Research in University Libraries. In *Art Libraries Journal*, 2018, Vol. 43, No. 4, p. 185-195. ISSN 0307-4722.

*Your Lucky Number Is 4 #SRGSCS*. Released on 16<sup>th</sup> April 2021. [online]. [2022-05-07]. Available at: <<https://twitter.com/specialreserves/status/1383087919179644932?s=21>>.

ZONNEVELD, L., BIGGEMANN, S.: Emotional Connections to Objects as Shown through Collecting Behaviour: The Role of Ardour. In *Australasian Marketing Journal*, 2014, Vol. 22, No. 4, p. 325-334. ISSN 1441-3582.

